REMARKS/ARGUMENTS

Applicant respectfully requests reconsideration and withdrawal of the rejections of the instant application in view of the following remarks, which place the application into condition for allowance.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-3 are pending in this application and are rejected in the Office Action mailed on July 3, 2007.

II. THE REJECTIONS UNDER 35 U.S.C. § 102(b) AND 35 U.S.C. § 103(a)

In the Office Action, claim 1 was rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Tanaka et al. (US 5548415), hereafter "Tanaka."

Claims 2 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka in view of Huang (US 6175659), hereafter "Huang."

Both rejections are traversed for at least the following reasons.

Instant claim 1 recites, *inter alia*,

> "An image processing system ...
>
> the object pixel detecting means comprises a density judgment section which determines the relevant pixel to be a prospective object pixel when the density of the relevant pixel is higher than a first threshold value higher than the density of the background of the border of the original and not higher than the density of a thinnest line in lines which form said characters ..." (Emphasis added)

As understood by the Applicant, Tanaka relates to an image processing apparatus, wherein images on an original document captured by an image capturing device are classified into a binary image and a gradation image, and the densities of the images are then converted using density conversion curves, which are provided for binary images and gradation images, to output an image signal representing converted images. *Tanaka*, Abstract.

Additionally, as understood by the Applicant, Huang relates to an image scaling method and apparatus that uses adaptive edge enhancement, a plurality of sets of gradient threshold values and enhancement threshold values correspond respectively to predetermined enhancement modes. *Huang*, Abstract.

In the Office Action, the Examiner asserts that Fig. 4 of Tanaka discloses the density judgment section recited in claim 1, which determines the relevant pixel to be a prospective object pixel when the density of the relevant pixel is higher than a first threshold value, which is higher than the density of the background of the border of the original and not higher than the density of the thinnest line among lines that form the characters, and is not higher than a second threshold value, which is not lower than the density of the thinnest line among lines that form the characters. Applicant respectfully disagrees.

Fig. 4 of Tanaka discloses only an edge detection circuit which detects edges which have various levels of sharpness based on the value of the relevant pixel and the value of the pixels adjacent to the relevant pixel. That is, the density judgment section recited in claim 1 is different from the edge detection circuit disclosed in Tanaka.

More specifically, the density judgment section determines the relevant pixels to be the prospective object pixel when the density of the relevant pixel is higher than the first threshold value and is not higher than the second threshold value. The first threshold value is determined

based on the density of the background of the border of the original and the density of the thinnest line among lines that form the characters. The second threshold is determined based on the density of the thinnest line among lines that form the characters. That is, the first threshold value and the second threshold value are different from the threshold T2 and the threshold T3 of Tanaka.

Additionally, the Examiner asserts that Tanaka discloses determining the relevant pixel is the object pixel to be subjected to enhancement processing when the density judgment section determines the relevant pixel to be a prospective object pixel and the thin line image detecting section determines the relevant pixel to be a thin line pixel.

However, Tanaka fails to teach or disclose the feature recited in claim 1. Tanaka merely discloses that the original image is classified into a binary image or a gradation image based on the output of the edge detection circuit and the output of the thin line detection circuit. Therefore, since Tanaka does not disclose or suggest the above identified features of the present invention, claim 1 is patentable.

In order for a Section 102 rejection to stand, the prior art reference must contain all of the elements of the claimed invention. *See Lewmar Marine Inc. v. Barient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). Applying the law to the instant facts, because, as discussed above, the teachings of Tanaka relied upon by the Examiner in the Office Action do not provide for a method of comparing the density of a target pixel with the density of a background pixel and the density of a pixel in a thinnest line of an original character; therefore, the Section 102(b) rejection must fail as a matter of law. Accordingly, since Tanaka does not contain all of the elements of the claimed invention, Applicant respectfully requests that the Section 102 rejection be withdrawn.

Furthermore, the rejection of claims 2 and 3 under Section 103 is also unwarranted. Tanaka, alone or in combination with Huang, fails to teach or suggest the feature of the claimed invention discussed above..

Specifically, neither Tanaka nor Huang, considered either alone or in any fair combination, discloses or suggests a density judgment section which determines the relevant pixel to be a prospective object pixel when the density of the relevant pixel is higher than a first threshold value higher than the density of the background of the border of the original and not higher than the density of a thinnest line in lines which form said characters, as recited in Applicant's claims. Accordingly, Applicant respectfully requests that the Section 103 rejection be withdrawn.

For at least the foregoing reasons, it is respectfully submitted that independent claim 1 is patentably distinguished over Tanaka and Huang and is therefore allowable.

Further, it is submitted that claims 2-3 that depend from claim 1 are allowable as well.

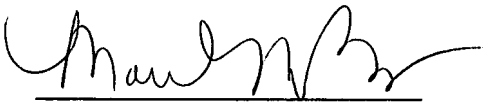
Statements appearing above with respect to the disclosures in the cited references represent the present opinions of the Applicant's undersigned attorney and, in the event that the Examiner disagrees with any such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the respective reference providing the basis for a contrary view.

CONCLUSION

In view of the foregoing, it is believed that all of the claims in this application are patentable over the cited documents, and an early and favorable consideration thereof is solicited.

Please charge any fees incurred by reason of this response and not paid herewith to Deposit Account No. 50-0320.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP

By: 

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